

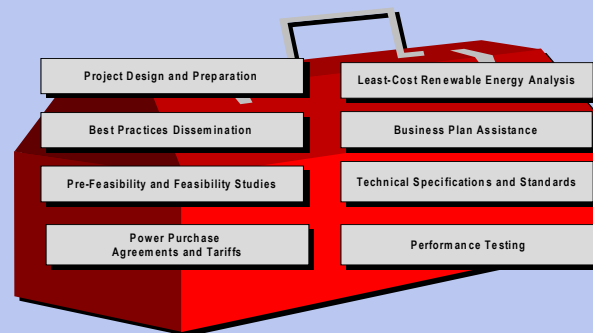
The World Bank

Investing in Renewable Energy for Rural Development

The World Bank Group Is Scaling Up Its Support for Renewable Energy

- ◆ IBRD/IDA Lending Operations
- ◆ Global Environment Facility (GEF) (including GEF/Bank Strategic Alliance for Renewables) ESMAP
- ◆ Asia Alternative Energy Program (ASTAE)
- ◆ AFRREI
- ◆ Solar Development Corporation (SDC) promotes photovoltaic (PV) development
- ◆ IFC — (REEF, PVMTI, and SME)
- ◆ Prototype Carbon Fund

The World Bank Group's Renewable Energy Toolbox



Renewable energy: making a difference in India

The India Renewable Energy Development Project

This project has solar PV, wind, and mini-hydro components. A \$26 million GEF grant supports both the wind farm and solar PV market development components. The solar PV component (\$55 million) is expected to address the financing, delivery, and installation of up to 3 megawatts (MW) of equipment for lighting, water pumping, and other applications. IREDA has sanctioned solar PV projects with a combined capacity of 4.2 MW_p. Of this, nearly 1 MW_p has been installed through some 40,000 systems. Fourteen wind power projects were financed through this project, with a total capacity of 49.9 MW. The project also directly financed 19 small hydro projects with a total capacity of 43.5 MW. Total World Bank (WB)/GEF support for the renewable energy components is **\$141 million**. The Board approval date is December 17, 1992; the closing date was extended to December 31, 2000.

The Sri Lanka Energy Services Delivery Project (ESD)

This project encourages the provision of grid and off-grid energy services using renewable energy and demand-side management (DSM) investments. The project includes an ESD Credit Program Component to help finance investments by the private sector, (nongovernmental organizations (NGOs), and cooperatives in off-grid solar PV, and village hydro schemes of grid-connected mini-hydro sites and other renewable energy applications. The other components are: (a) CEB-executed grid-connected Pilot Wind Farm and (b) technical assistance to the CEB to strengthen its capacity to help ESD Credit Program subproject developers and to undertake DSM activities, including DSM program design and implementation, load research, and an energy-efficient building code. Total WB/GEF support for this stand-alone alternative energy project is **\$30.1 million**, of which \$24.2 million is WB credit and \$5.9 million is a GEF grant. Board approval date is March 18, 1997; the closing date is December 31, 2002.



Pilot wind farm in Sri Lanka; installed as part of the ESD project

Argentina Renewable Energy for Rural Markets

The Renewable Energy in the Rural Market Project promotes private-sector investment in the power sector, taking into account appropriate regulatory and policy frameworks. The GEF objectives are to remove market barriers for the dissemination of renewable energy sources and reduce greenhouse gas emissions by replacing domestic uses of energy with renewable energy systems. The project also aims to alleviate rural poverty, particularly at the provincial level. Total World Bank/GEF support is **\$40 million**.



WB/GEF Renewable Energy Scale-Up Program (FY 2002)

The Partnership aims to support the GOC Renewable Energy Program to be presented in the 10th and 11th Five-Year Plans. The objective will be to reduce environmental emissions from coal-fired power generation by developing sustainable commercial markets for electricity from renewable energy. This will be done by creating a mandated large-scale market and reducing costs for mature technologies such as wind farms, small hydroelectricity, and biomass. Estimated WB/GEF support for this project will be **\$100–\$400 million**.